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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,292	06/26/2001	Brad A. Armstrong	28	4333

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EXAMINER

CHOW, DOON Y

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,292

Applicant(s)

ARMSTRONG, BRAD A.

Examiner

Dennis-Doon Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-230 is/are pending in the application.
- 4a) Of the above claim(s) 1-192, 195-203 and 206-220 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 193-194, 204-205, and 221-230 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 193-194 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wislocki (US 4933670) in view of Satoshi (JP 9213168), Inoue (5207426) and Poulsom (DE 40013227).

Wislocki disclose a multiple axes controller comprising at least fourteen keys (86 and 88, Fig. 2) and a two-axes member positioned on the controller to activate two optical sensors (40 and 50, Fig. 1). The controller inherently comprises at least twelve sensors since each of the two optical sensors inherently comprises two sensors for sensing movements of opposition directions with a same axis, and each of the at least fourteen keys inherently comprises at least one sensor.

Wislocki does not explicitly disclose the key sensors are proportional sensors. However, using proportional sensors as key sensors is well known in the art. Satoshi, for example, teaches proportional pressure sensors. It would have been obvious to one ordinary skill in the art to use Satoshi's proportional pressure sensors as the key sensors in Wislocki's controller since Wislocki does not disclose use any specific sensors as the key sensors.

Wislocki does not disclose including two sensors in a single key.

Inoue discloses a single (12) having multiple sensors.

In light of Inoue, it would have been obvious to one of ordinary skill in the art to combine two of Wislocki's keys into a single key to activate to sensors. This would have been obvious because it reduces the structures of the keys.

Wislocki does not disclose a vibration feedback member.

Poulsom disclose a controller comprising a feedback motor generates a vibration feedback.

In light of Poulsom, it would have been obvious to one ordinary skill in the art to use Poulsom's feedback means in Wislocki's controller so that a vibration feedback can be generated.

3. Claims 204-205 and 221 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wislocki (US 4933670) in view of Satoshi (JP 9213168) and Poulsom (DE 40013227).

Regarding to claims 204-205, the disclosures of Wislocki, Satoshi and Poulsom in the above paragraphs apply here as well.

Regarding to claim 221, the disclosures of Wislocki, Satoshi and Poulsom in the above paragraphs apply here as well.

Wislocki further discloses a rotating member (Fig. 1) for generating 3D signals. The rotating member inherently comprises six sensors, two for each axis of three axes. Wislocki does not disclose the rotating member comprises twelve sensors. However, it

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is considered a matter of obvious design choice to add additional six sensors to the rotating member since this does not provide any unexpected result.

4. Claims 222, 224-226, 228 and 230 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (4555960) in view of Poulson (DE 4013227).

King disclose an image controller comprising a three-axes member for activating a plurality of sensors to generating signal information, and a rotating member for a plurality of sensors to generating signal information. King does not explicitly disclose each of rotating member and the three-axes member activating twelve sensors.

However, it is considered a matter of obvious design choice to use each of the rotating member and the three-axes member for activating twelve sensors since this does not provide any unexpected result.

King does not disclose a vibration feedback member.

Poulson discloses a controller comprising a vibration feedback member for generating a vibration feedback. The vibration feedback member includes a motor a weight member.

In light of Poulson, it would have been obvious to one ordinary skill in the art to use Poulson's feedback member in King's controller so that a vibration feedback can be generated.

5. Claims 223, 227 and 229 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Poulson as applied to claims 222, 224-226, 228 and 230 above, and further in view of Asher (5689285).

King does not disclose the sensors are pressure-sensitive sensors.

Asher discloses a controller comprising a plurality of small size pressure-sensitive sensors for generating control signals.

In light of Asher, it would have been obvious to one ordinary skill in the art to substitute Asher pressure-sensitive sensors for King's sensors because the sizes of Asher's pressure-sensitive sensors are a lot smaller than King's sensors. By replacing King's sensors with Asher's pressure-sensitive sensors, the sizes of the sensors can be significantly reduced.

Response to Arguments

6. Applicant's arguments filed 5/19/05 have been fully considered but they are not persuasive.

The priority claim amendment filed 6/18/03 is noted by the examiner. A new oath and declaration is required to include CIP priority claim information.

Arguments with regarding to claims 193-194.

Applicant argues that the references do not guide one skilled in the art to pick elements from four references and combine them in a precise manner as needed to simulated the claimed invention. The examiner disagrees with applicant's arguments because it is not necessary that the references actually suggest, expressly or in so

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many words, the changes or improvements that applicant has made. The test for combining references is what the references as a whole would have suggested to one of ordinary skill in the art. In re Sheckler, 168 USPQ 716 (CCPA 1971).

Applicant argues that the combined references does not address the limitation of a single first button is positioned to actuate a first sensor and also actuated a second sensor; the first sensor being a proportional sensor and the second sensor is a switch capable of indication an On state. The examiner disagrees with applicant's arguments because Wislocki teaches a plurality of sensors which include ON/Off state, Satoshi teaches proportional sensors, and Inoue teaches using a single button to actuate a first and sensors. Thus, the combination of these references clearly teaches the limitations as argued. Poulsom teaches a vibration feedback member which is turned on by a sensor.

Arguments with regarding to claims 204-205 and 221.

As to applicant's arguments with regarding to combining references, the above responses applied.

Applicant argues that "a plurality of said sensors each including spacing isolation the plurality of sensors against being activated by vibration from said active tactile feedback" is not addressed, The examiner disagrees with applicant's arguments because Wislocki teaches a plurality of sensors, and Poulsom teaches a vibration member which is spaced from multiple sensors.

Arguments with regarding to claims 222, 224-226, 228 and 230.

Applicant's arguments with regarding to the obvious design choice is not persuasive because the benefits as mentioned is contributed by the member of sensors, instead they are contributed by the arrangement of the sensors and the structures of the controller.

As to applicant's arguments with regarding to combining references, the above responses applied.

Arguments with regarding to claims 223, 227, and 229.

As to applicant's arguments with regarding to combining references, the above responses applied.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 571-272-7767. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Chow
August 5, 2005

Dennis-Doon Chow
Primary Examiner
Art Unit 2677



DENNIS-DOON CHOW
PRIMARY EXAMINER